

Title Terms: FUEL; INJECTION; VALVE; FUEL; INJECTION; SYSTEM; INTERNAL;  
COMBUST; ENGINE; COMPRISE; STROKE; MAGNIFY; UNIT; ONE; LEVER; PLATE; ONE;  
RIGID; RADIAL; LEVER; SEGMENT  
Derwent Class: A88; Q53  
International Patent Class (Main): F02M-051/06  
File Segment: CPI; EngPI

2/5/1

DIALOG(R) File 351:Derwent WPI  
(c) 2002.Derwent Info Ltd. All rts. reserv.

013100771 \*\*Image available\*\*

WPI Acc No: 2000-272642/ 200024

XRFX Acc No: N00-204249

Dosing device with temperature compensation especially for vehicle fuel  
injection - uses compensation device incorporated in valve needle for  
compensating temperature dependent expansion

Patent Assignee: SIEMENS AG (SIEI )

Inventor: GOTTLIEB B; KAPPEL A; MEIXNER H; MOCK R

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 19854506	C1	20000420	DE 1054506	A	19981125	200024 B
FR 2786270	A1	20000526	FR 9914720	A	19991123	200033

Priority Applications (No Type Date): DE 1054506 A 19981125

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 19854506	C1		9	G01F-013/00	
FR 2786270	A1			G01F-013/00	

Abstract (Basic): DE 19854506 C

The dosing device has a fluid chamber (2) containing an axially  
displaced valve needle (3) for selective closure of its outlet opening  
(201), with an integrated compensation element (9), provided by 2  
spaced walls coupled together via a peripheral membrane, to provide a  
hydraulic chamber coupled to the fluid chamber via at least one  
opening.

A rapid movement of one half of the valve needle is transmitted to  
the other half without loss, a slow movement of one half of the valve  
needle compensated by relative movement of the spaced walls of the  
compensation element.

USE - For dosing water, fuel, or ink.

ADVANTAGE - Dosing device is unaffected by temperature variations.

Dwg.2/3

Title Terms: DOSE; DEVICE; TEMPERATURE; COMPENSATE; VEHICLE; FUEL;  
INJECTION; COMPENSATE; DEVICE; INCORPORATE; VALVE; NEEDLE; COMPENSATE;  
TEMPERATURE; DEPEND; EXPAND

Derwent Class: Q53; S02; X22

International Patent Class (Main): G01F-013/00

International Patent Class (Additional): F02M-051/06; F02M-061/08;

F02M-061/10; F02M-061/16

File Segment: EPI; EngPI